

WHAT IS CLAIMED IS:

1. An opening/closing structure for a flip provided to a portable phone, comprising a flip that is rotatable in an opening direction from a condition where a phone operating portion provided on a surface of a portable phone body is covered by the flip to a condition where the phone operating portion is exposed is provided at a predetermined position on the surface of the portable phone body and a biasing mechanism provided with a closing biasing force to bias the flip in a closing direction in a closed side position from a predetermined position in the case where the flip kept under a condition where the phone operating portion is covered is rotated through a predetermined distance when the flip is kept slanted to the surface of the portable phone body and an opening biasing force to bias the flip in an opening direction in an opened side position from the predetermined position, said biasing mechanism being provided in a hinge portion between the flip and the portable phone body,

further comprising:

a rotary shaft;

a first cam portion provided in said rotary shaft;

a bearing member; and

a second cam portion provided in said bearing member and having a shape to come into pressing contact with said first cam and convex/concave engaged with said first cam portion;

wherein a relative rotation biasing force is generated between said rotary shaft and said bearing member by the engagement from the non-engagement between said first cam portion of said rotary shaft and said second cam portion of said bearing member when said rotary shaft and said bearing member are rotated relative to each other, and the relative rotation biasing force generated between said rotary shaft and said bearing member is caused to function as the closing biasing force

and the opening biasing force to thereby constitute said biasing mechanism; and

at least a contact portion between said first cam portion of said rotary shaft and said second cam portion of said bearing member is formed by a member made of metal.

2. An opening/closing structure for a flip provided to a portable phone, comprising a flip that is rotatable in an opening direction from a condition where a phone operating portion provided on a surface of a portable phone body is covered by the flip to a condition where the phone operating portion is exposed is provided at a predetermined position on the surface of the portable phone body and a biasing mechanism provided with a closing biasing force to bias the flip in a closing direction in a closed side position from a predetermined position in the case where the flip kept under a condition where the phone operating portion is covered is rotated through a predetermined distance when the flip is kept slanted to the surface of the portable phone body and an opening biasing force to bias the flip in an opening direction in an opened side position from the predetermined position, said biasing mechanism being provided in a hinge portion between the flip and the portable phone body,

further comprising:

a rotary shaft;

a first cam portion provided in said rotary shaft;

a bearing member; and

a second cam portion provided in said bearing member and having a shape to come into pressing contact with said first cam and convex/concave engaged with said first cam portion;

wherein a relative rotation biasing force is generated between said rotary shaft and said bearing member by the engagement from the non-engagement between said first cam portion of said rotary shaft and

said second cam portion of said bearing member when said rotary shaft and said bearing member are rotated relative to each other, and the relative rotation biasing force generated between said rotary shaft and said bearing member is caused to function as the closing biasing force and the opening biasing force to thereby constitute said biasing mechanism;

said first cam portion of said rotary shaft and said second cam portion of said bearing member are formed by a member made of synthetic resin; and

a contact portion between said first cam portion and said second cam portion is constituted by a metal member at a mutual convex/concave portion between said first cam portion and said second cam portion.

3. An opening/closing structure for a flip provided to a portable phone, comprising a flip that is rotatable in an opening direction from a condition where a phone operating portion provided on a surface of a portable phone body is covered by the flip to a condition where the phone operating portion is exposed is provided at a predetermined position on the surface of the portable phone body and a biasing mechanism provided with a closing biasing force to bias the flip in a closing direction in a closed side position from a predetermined position in the case where the flip kept under a condition where the phone operating portion is covered is rotated through a predetermined distance when the flip is kept slanted to the surface of the portable phone body and an opening biasing force to bias the flip in an opening direction in an opened side position from the predetermined position, said biasing mechanism being provided in a hinge portion between the flip and the portable phone body.

further comprising:

a rotary shaft;

a first cam portion provided in said rotary shaft;

a bearing member; and
a second cam portion provided in said bearing member and having a shape to come into pressing contact with said first cam and convex/concave engaged with said first cam portion;

wherein a relative rotation biasing force is generated between said rotary shaft and said bearing member by the engagement from the non-engagement between said first cam portion of said rotary shaft and said second cam portion of said bearing member when said rotary shaft and said bearing member are rotated relative to each other, and the relative rotation biasing force generated between said rotary shaft and said bearing member is caused to function as the closing biasing force and the opening biasing force to thereby constitute said biasing mechanism;

a metal member is fitted and arranged in a mutual convex/concave portion between said first cam portion of said rotary shaft and said second cam portion of said bearing member; and

at least a contact portion between said first cam portion of said rotary shaft and said second cam portion of said bearing member is constituted by a member made of metal.